

**Sherman, Teresa**

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**From:** Sherman, Teresa  
**Sent:** Friday, May 07, 2010 8:13 AM  
**To:** 'Ramesh Sundareswaran'  
**Subject:** Preliminary 5-Year Review Summary Report for Claim Number 13162, 1092 E. Washington Avenue, El Cajon, CA, SAM Case #H13057-002

Ramesh,  
DEH/SAM received your Preliminary 5-Year Summary Report for the above Thrifty site (ARCO Facility #9533) on March 10, 2010. I apologize for the delay in this response, but as the new case manager, I needed to review the case files and several recent reports (and meet with Kevin Heaton- Hydrogeologist) before I could evaluate the summary. SAM staff agree with your conclusions and recommendations for the site, and understand from the summary that the State UST Cleanup Fund concurs with the ongoing corrective action at the site.

I plan to prepare a letter to the Responsible Party requesting a Workplan for the installation of one additional monitoring well in the southeast corner of the site (recommended by the consultant and cited in your conclusion #4) and approving the consultant's recommendation to convert the vapor extraction component of the MPE system to catalytic mode. In addition, I am going to request more information on the vapor and groundwater remediation system performances (including cumulative vapor recovery and mass removal graphs) in the next remediation report, so that we can discuss modifications to improve the system. Kevin Heaton also requested that we have the RP resample some of the weepholes entering the Washington Channel on the north side of the property.

Also, I made a correction in Geotracker on the address of the property. The correct address for the parcel is 1092 East Washington, not 1098 (which was what was on initial documents).

Take care,  
Teresa

Teresa Sherman  
Environmental Health Specialist  
County of San Diego, Department of Environmental Health  
Site Assessment and Mitigation Group  
(619) 338-2258

Mail Stop D-561

*(5 year summary attached )*  
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5/7/2010



# State Water Resources Control Board



Linda S. Adams

Secretary for  
Environmental Protection

## Division of Financial Assistance

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Arnold Schwarzenegger

Governor

February 28, 2010

1092

MAR 10 2010

ENVIRONMENTAL  
HEALTH

Danny Martinez

San Diego County Department of Environmental Health

Site Assessment and Mitigation Program

P.O. Box 129261

San Diego, CA 92112-9261

### PRELIMINARY 5-YEAR REVIEW SUMMARY REPORT FOR CLAIM NUMBER 13162; 1098 E Washington Avenue, El Cajon, CA 92020

The UST Cleanup Fund (Fund) has completed our review of San Diego County Department of Environmental Health (County) case number H13057-002. The Preliminary 5-Year Review Summary Report for this case is enclosed for your information and comment. Please note that the Fund's recommendations are based on review of information contained in the Fund's case files, data currently in the Geotracker database and any other sources of information that were readily available to Fund staff at the time the review was conducted. Consequently, they may not reflect historical information that has not been uploaded to the Geotracker database or available in the Fund's case files and any data that has been recently submitted to your office. During our review we solicited input from your County caseworker to obtain the current status of corrective action at this site as well as information on any outstanding issues. If additional information was provided by the caseworker, it was considered by Fund staff and incorporated into our recommendations, if applicable.

The Fund requests that the County staff notify the Fund within 45 days from the date of this letter as to whether you agree or disagree with our recommendations for this case. If you agree with our recommendation, we request that you provide the Fund with an estimated timeframe to either implement the recommendations for additional corrective action or for closing this case. If you do not agree with our recommendations, we request that you provide the Fund with a summary of the reasons for disagreeing and/or impediments to implementing the recommendations for additional corrective action or closing this case. Responses to the Fund may be provided by e-mail, letter or a copy of correspondence to the RP, if the correspondence addresses all the information requested by the Fund. Please direct your response to:

Ramesh Sundareswaran

Underground Storage Tank Cleanup Fund

State Water Resources Control Board

P.O. Box 944212

Sacramento, CA 94244-2120

*California Environmental Protection Agency*



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Fund staff will be sending copies of all completed 5-Year Review Summary Reports to claimants 45 days from the date of this letter unless the County notifies the Fund that they wish to discuss this case prior to transmittal to the claimant. If you or your staff has any questions or concerns on specific reports that you would like to discuss with the Fund prior to transmittal of the report to the claimant, please contact Ramesh Sundareswaran at (916) 341-5670 or by email ([rsundareswaran@waterboards.ca.gov](mailto:rsundareswaran@waterboards.ca.gov)) within this period.

Sincerely,



Robert Trommer  
Senior Engineering Geologist  
Chief, Technical Review Unit  
Underground Storage Tank Cleanup Fund

cc: ✓ Teresa Sherman, San Diego County DEH  
Julie Chan, RWQCB, San Diego Region



Linda S. Adams  
Secretary for  
Environmental Protection

# State Water Resources Control Board

## Division of Financial Assistance

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Arnold Schwarzenegger  
Governor

## PRELIMINARY USTCF 5-YEAR REVIEW SUMMARY

USTCF Claim No.: 13162  
Claimant Name: Thrifty Oil Company Inc  
Site Name: ARCO Facility # 9533  
Site Address: 1098 E. Washington Avenue,  
El Cajon  
LOP: San Diego Dept of Environmental  
Health (SDDEH)  
Regional Board: R9

LOP Caseworker: Teresa Sherman  
Lead Agency Case No: H10257-002  
Global ID: T0607301260  
Date LOC Issued: 9/24/2002  
USTCF Expenditures to Date: \$722,769  
USTCF Priority: C

13057

### I. CASE INFORMATION

Tank No.	Size in Gallons	Contents	Closed in Place/ Removed/Active?	Date
T001	10,000	Gasoline	Removed	1986
T002	8,000	Gasoline	Removed	1986
T003	6,000	Gasoline	Removed	1986
T004	280	Waste oil	Removed	1987

### II. RELEASE INFORMATION T004

- Source of Release: UST system.
- Date of Release: 1987.
- Affected Media: Soil and groundwater (GW).

### III. SITE CHARACTERIZATION INFORMATION

#### A. Site Information

- GW Basin: San Diego Hydrologic Unit; Lower San Diego Hydrologic Area; El Cajon Hydrologic Sub Area.
- Surface Water (SW): Washington Channel.
- GW Beneficial Uses: Municipal and domestic.
- SW Beneficial Uses: Agricultural, cold and warm freshwater habitats, industrial service, industrial process, water contact recreation, non-water contact recreation and wildlife habitat.
- Land Use Designation: Commercial and residential.
- Distance to Nearest Supply Well (Municipal or Domestic): According to GeoTracker, there are no active supply wells located within a 1/2-mile radius of

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the site. The consultant has however identified a domestic well approximately 1300 feet and an irrigation well approximately 2175 feet, both to the southeast of the site.

- Distance to Nearest Surface Water Body: The closest body is concrete lined Washington Channel located to the immediate north of the site.
- Minimum Groundwater Depth (historical): Approximately 2.31 feet below ground surface (bgs).

Maximum Groundwater Depth (historical): Approximately 15.47 feet bgs.

Flow Direction: North-northwest.

- Soil Types: Silty sand, clayey sand, sandy clay and decomposed granite.
- Maximum Depth Sampled: Approx. 27 feet bgs.

#### B. Well Information

Well Designation	Date Installed	Screen Interval (feet bgs)	Most Recent DTW (feet bgs) 11/2009
GT-1	1990	6-21	Approx. 13.23
GT-2	1990	7-22	Approx. 12.39
GT-3	1990	6-21	Approx. 5.77
GT-4	1990	7-22	Approx. 9.17
GT-5	1990	7-22	Approx. 9.68
GT-6	1990	7-17	Approx. 12.80
GT-7	1990	7-22	Approx. 12.89
GT-8	1990	7-22	Approx. 12.96
GT-9	1990	7-17	Approx. 10.40
GT-10	1990	6-21	Approx. 8.61
GT-11	2000	5-20	Approx. 9.31
GT-12	2000	4.5-24.5	Approx. 7.81
GT-13	2000	5-20	Approx. 12.18
GT-14	2000	4.5-24.5	Approx. 8.04
GT-15	2000	5-25	Approx. 5.67
GT-16	2001	5-26	Approx. 10.11
GT-17	2001	5-26	Approx. 10.28
GT-18	2001	5-26	Approx. 9.99
GT-19	2009	5-20	Approx. 9.06
GT-20	2009	5-20	Approx. 9.68
GT-22	2003	5-20	Approx. 10.11
GT-23	2003	5-25	Approx. 9.39
RS-1	1989	5-30	Approx. 13.33
RS-2	1989	5-30	Approx. 9.53
RS-3	1989	5-30	Approx. 10.89

NA: Not available.

#### IV. MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS

Contaminant	Soil (mg/kg)		RSLs		Water (ug/L)		CA MCLs (ug/L)
	Maximum @ location & sampling date	Latest	Residential (mg/kg)	Industrial (mg/kg)	Maximum @ location & sampling date	Latest @ location & sampling date	
TPH-g	10,500@ RS3-5' 10/89 ✓	NA	NA	NA	FP@ GT-11 11/09	FP@ GT-11 11/09	NA
TPH-d	NA	NA	NA	NA	FP@ GT-11 11/09	FP@ GT-11 11/09	NA
Benzene	54@ RS3-5' 10/89 ✓	NA	1.1	5.6	FP@ GT-11 11/09	FP@ GT-11 11/09	1
Toluene	196@ CB7-8' 6/05 ✓	NA	5000	46,000	FP@ GT-11 11/09	FP@ GT-11 11/09	150
Ethylbenzene	99@ CB7-8' 6/05 ✓	NA	5.7	29	FP@ GT-11 11/09	FP@ GT-11 11/09	300
Total Xylenes	533@ CB7-8' 6/05 ✓	NA	600	2600	FP@ GT-11 11/09	FP@ GT-11 11/09	1,750

TRPH/ 2770mg/kg tank record 7/86  
total extractable  
HC

California Environmental Protection Agency



9/02- 44 tons excavated

MTBE	2.01@ CB6-16' 6/05 ✓	NA	39	190	FP@ GT-11 11/09	FP@ GT-11 11/09	13 primary 5 secondary
TBA	NA	NA	NA	NA	FP@ GT-11 11/09	FP@ GT-11 11/09	12 (NL)
1,2-DCA	NA	NA	0.45	2.2	NA	NA	0.5
Lead	NA	NA	400	800	NA	NA	15
PCE	NA	NA	0.57	2.7	NA	NA	5
TCE	NA	NA	2.8	14	NA	NA	5

RSLs USEPA Region 9 Regional Screening Levels  
MCL Maximum Contaminant Levels  
NL Notification Level  
NA Not Analyzed, Not Applicable or Data Not Available  
ND Not detected at or above method detection limits.  
FP Free product measured at > 0.01 foot.

**V. FREE PRODUCT:** Free product was detected as recently as the last quarter of 2009. The free product had migrated offsite and encroached beneath adjacent residences.

## VI. SOIL AND GROUNDWATER REMEDIATION

**A. Soil Excavation:** Approximately 44 tons of contaminated soil have been excavated and removed from the site.

### B. In-Situ Soil Remediation:

- **METHOD:** High Vacuum Dual Phase Extraction (HVDPE). Multiphase extraction (MPE).
- **DURATION:** HVDPE was from 2002-2007. MPE has been ongoing from 2009.

### C. Groundwater Remediation:

- **METHOD:** HVDPE. MPE.
- **DURATION:** HVDPE was from 2002-2007. MPE has been ongoing from 2009.

- D. Groundwater Trends:** Majority of the wells have consistently shown contaminant levels that are either low or non-detectable, measured over numerous monitoring rounds. However, there are some wells that are known to exhibit contaminant levels orders of magnitude above MCLs or have free product in them.

## **VII. COMMENTS AND JUSTIFICATION FOR RECOMMENDED ACTION**

- A. Site Description:** Site is an active fuel service station.
- B. Groundwater Monitoring Summary:** Groundwater has generally been monitored periodically at the site since 1991.
- C. Remediation Summary:** HVDPE for a period of approximately 5 years. MPE since 2009.
- D. Vapor Pathway Evaluation:** A vapor risk assessment established no significant risks above regulatory thresholds to the occupants of adjacent residences.
- E. Conclusions and Recommendation:**
1. The primary source of the suspected contamination appears to have been minimized through the removal of the USTS and the excavation and removal of contaminated soils.
  2. Mobile free product, consistently exceeding the (informal) California cleanup standard of a sheen, has been measured at the site. The free product has migrated offsite and has been found beneath adjacent residences.
  3. The extent of soil contamination has been assessed and observed to be generally limited to the site.
  4. The areal extent of the dissolved phase plume needs further definition particularly to the southeast.
  5. The contaminant mass in the groundwater does seem to have experienced some losses over time.
  6. There are no known supply water wells located within approximately 2500 feet of the site thereby eliminating any undue risks to a well in the vicinity from the dissolved plume at this time. The likelihood that the domestic and irrigation wells to the southeast of the site could be impacted is low given the dissolved plume's flow direction.
  7. The site's contamination appears to have impacted the channel to the north of the site. A 2001 weep hole sampling exercise indicated the presence of trace amounts of petroleum contamination in the channel.
  8. A vapor risk assessment established no significant risks to adjacent residences.



The Fund concurs with the ongoing corrective action at the site.



3/1/10

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3-1-10

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